

PART SPEC

DESCRIPTION: INVERTER,HIP0119A,SK2400H

SPECIFICATION: DC11.5V-45.0V,48KHZ,0 +50 ,BULK



SECTION :VD R&D

PAGE
REVISION

03	03	-	-	-	-	02	03	03	03	-	02	-	02	02	-	-				
02	02	-	-	01	-	01	02	02	02	-	-	-	-	-	-	-				
01	01	01	-	-	-	-	01	01	01	01	01	01	01	01	-	-				
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SHEET 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

REVISION

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DRAWN:

MYUNG-SOO NA

7202

SAMSUNG

DOC. NO.:

BN44-00044ACB

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CO.,LTD.

TOTAL
PAGE

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APPROVED:

BONG-KYEOM KIM

7196

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REV.	DATE	CONTENTS	DRAWN	APPROVED
00	2000.09.27	initial release	M.S NA	B.K KIM
01	2000.11.16	REVISION BY ECO NO:BN020000265 * CHANGE THICKNESS OF PCB (1.0T 1.6T) * PCB REVISION (1.1-> 1.6) * ADD PART ; Q170,D170,C120,R123,R120,R121,R122, L8,L9 *CHANGE INDUCTANCE : L1,L2:(85uH->47uH) *CHANGE TYPE OF PARTS : L1,L2,L3,L4 (MOLD TYPE->NON_MOLD) *CHANGE INDUCTANCE OF TRANS	M.S NA	B.K KIM
02	2001.04.30	REVISION BY ECO NO:BN020010150 * CHANGED SPEC:D2,D9,C1C,C3A,C17B,C53,C67,C4B,C4C,C18A,C18B,C18C R62,R87,R11,R118,R36,R36B,R61,R86,R12,R37,L3,L4,L1, L2,L8,L9 * ADDED SPEC:D2A,D9A,Q71A,Q72A,Q73A,Q74Q,R131A,R134A,R137A,R140, R132,R133,R135,R136,R138,R139,R141,R142,L8A,L9A *CANCELED:C3B,C17A,C80,C81,C82,C83,C103,C104,C153,C154, R20,R13,R13,R38,R63,R88 *CHANGED PCB PATTERN :REV1.6-> REV1.8 *CHANGED CIRCUIT,OUTPUT CURRENT, FREQUENCY	M.S NA	B.K KIM
03	2001.12.04	REVISION BY ECO NO :BN02001053A * CHANGED PARTS :C3A,C17B,D2,D2A,D9,D9A * ADD PARTS :Q6A,Q12A,D2B,D9B,C3B,C17A, * CHANGED PCB PATTERN : REV1.8-> 1.9 * CHANGED CIRCUIT * CHANGED TRANSFORMER INSULATOR : SR50-> SR55	M.S NA	B.J.KWAK

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PART SPEC

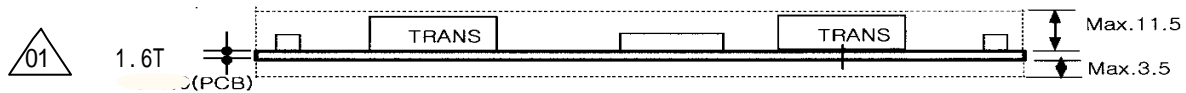
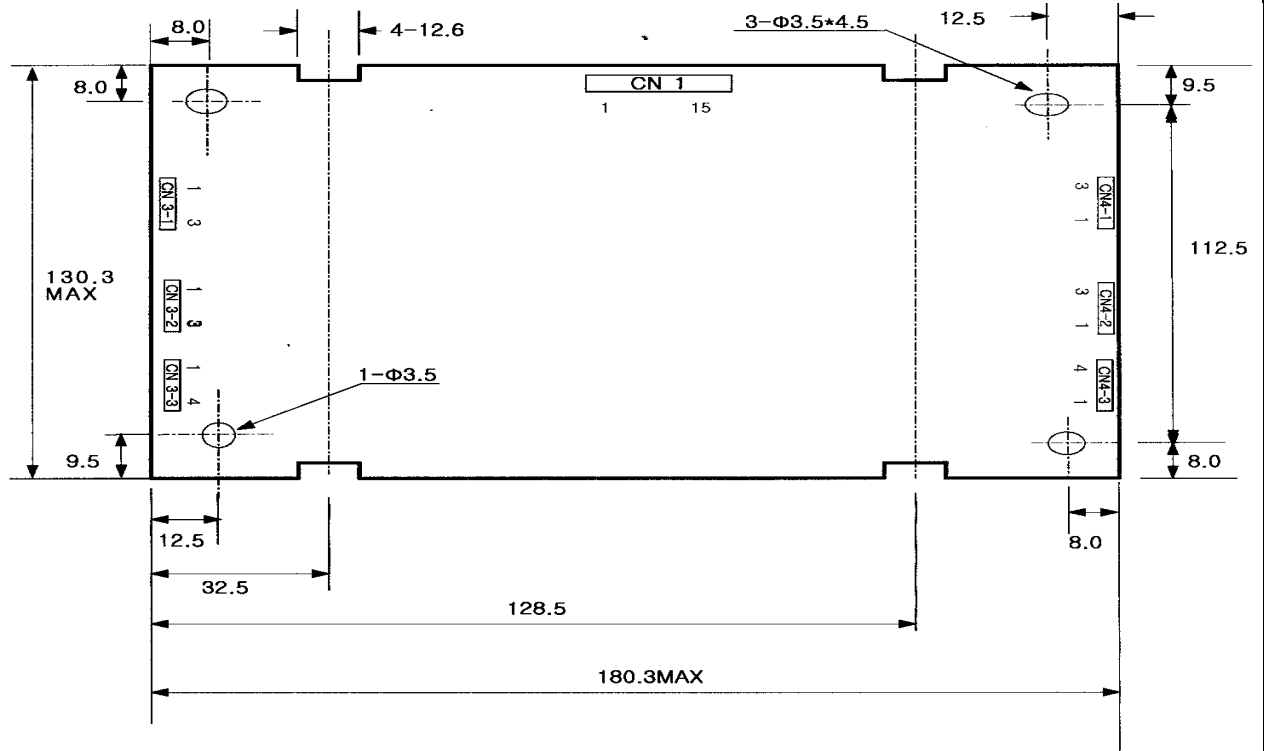
1.0 SCOPE

1.0.1 THIS DOCUMENT DEFINES FOR INVERTER,HIP0119A, SK2400H, DC11.5~45.0V,48KHz

1.0.2 USAGE : 24" OR 21.3" TFT LCD FOR PC24PS

2.0 RELATED DOCUMENTS

3.0 DIMENSIONS



4.0 ELECTRICAL CHARACTERISTIC

4.0.1 MAXIMUM RATINGS

SYMBOL	PARAMETER	RATING	UNIT
V_{in1}	input voltage1	11.5~45.0	V
V_{in2}	input voltage2	4.9~5.1	V
T_{opr}	operating temperature	0~+50	
T_{stg}	storage temperature	-30~+80	
H_{op}	operating/storage humidity	90	%RH

4.0.2 CONTROL SIGNAL

PIN NO.	SYMBOL	STATUS	ACTION	REMARKS
CN1 #4	BKLT-ON	HIGH	LAMP(CCFL)-ON	2.4~5.25V
		LOW	LAMP(CCFL)-OFF	0.8V MAX.



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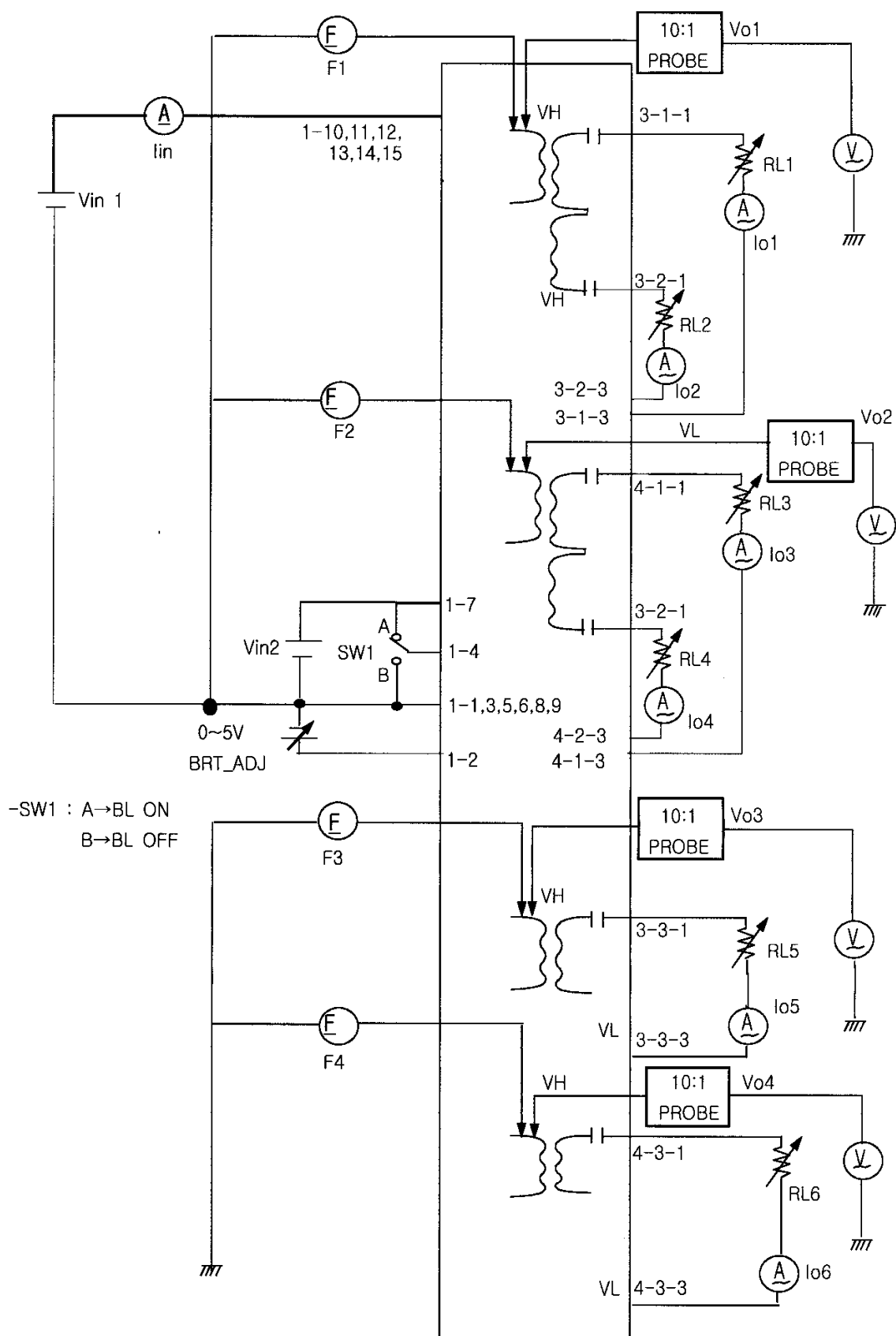
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4.0.3 TEST CIRCUIT



PART SPEC

4.0.4 INPUT/OUTPUT CHARACTERISTICS



ITEM	SYMBOL	CONDITION				SPECIFICATION			UNIT
		Vin1 (V) (DC- IN)	Vin2 (V)	BRT-ADJ	RL (kΩ)	MIN	TYP	MAX	
OUTPUT CURRENT	Io1 ~Io6(max)	11.5 ~45.0	5	0V	150 ± 0.5	6.1	7.0	7.9	mA _{rms}
	Io1 ~Io6(min)	11.5 ~45.0	5	5V	150 ± 0.5	1.5	3.0	4.5	
INPUT CURRENT	I _{in}	14	5	0V	150 ± 0.5	-	3.8	4.5	ADC
OPEN OUTPUT VOLTAGE	Vo(1)	11.5 ~45.0	5	0V		15.5	19.0	22.5	V _{rms}
	Vo(2)								
FREQUEN CY	F(1)	14	5	0V	150 ± 0.5	40	48	55	kHz
	F(2)								

OUTPUT CURRENT TEST CONDITION : SET CONDITION

5.0 FUNCTIONAL PIN DESCRIPTION

5.0.1 CN1 CONNECTOR 12505WS-15A00(YEONHO)

PIN NO	SYMBOL	REMARK
2	BRT_ADJ	0 ~ 5V
1,3,5,6,8,9	GND	GND
4	BL ON/OFF	CCFL Drive SIGNAL(Active HIGHT)
7	VDD	5V
10,11,12,13,14,15	DC-IN	DC INPUT Power(14V)

5.0.2 CN3-1 CONNECTOR:20015WR-050208(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	COLD	LOW

5.0.3 CN3-2 CONNECTOR : 20015WR-050208(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	COLD	LOW



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5.0.4 CN3-3 CONNECTOR :20015WR-070404(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	N.C	NO CONNECTION
4	COLD	LOW

5.0.5 CN4-1 CONNECTOR :20015WR-0505208(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	COLD	LOW

5.0.6 CN4-2 CONNECTOR :20015WR-0505208(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	COLD	LOW

5.0.7 CN4-3 CONNECTOR:20015WR-070404(YEONHO)

PIN NO	SYMBOL	REMARK
1	HOT	HIGHT 1
2	N.C	NO CONNECTION
3	N.C	NO CONNECTION
4	COLD	LOW

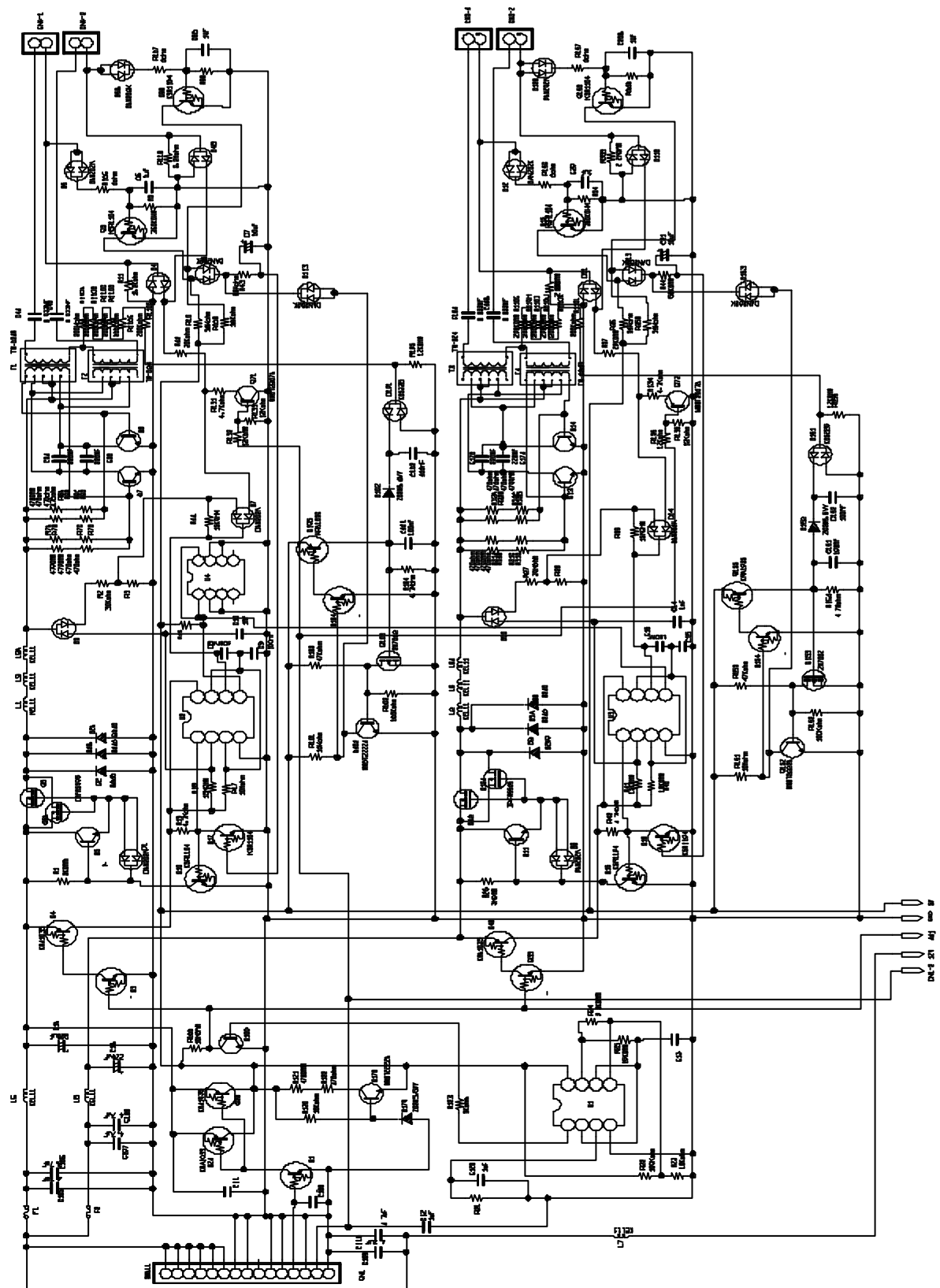


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6.0 INTERNAL CIRCUIT DIAGRAM

*CIRCUIT 1 *



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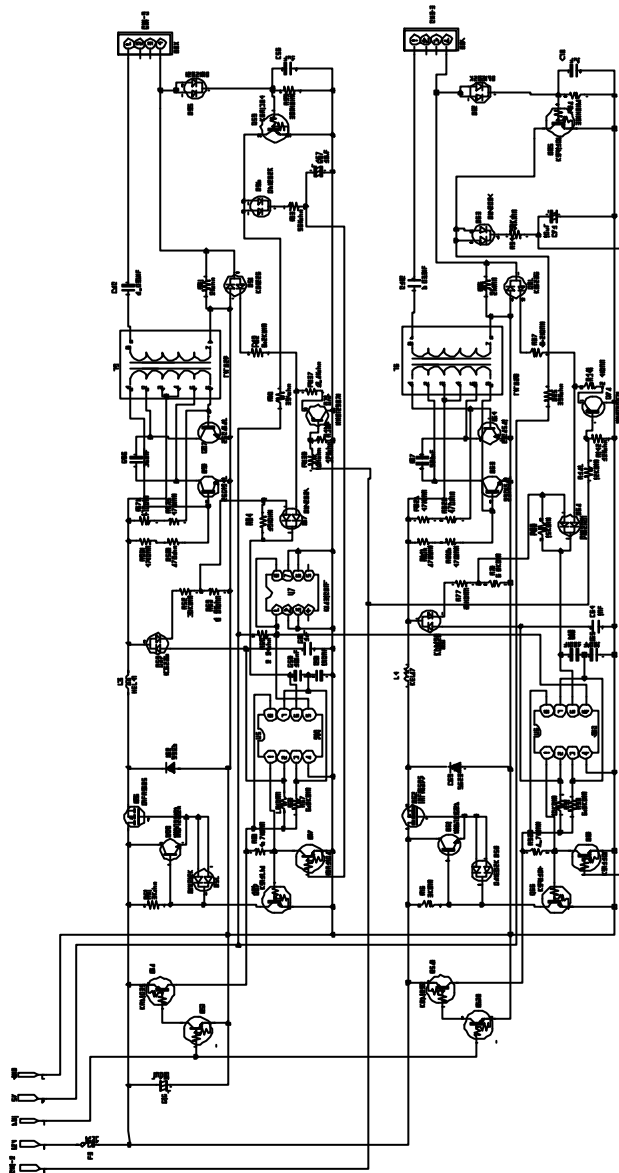
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*CIRCUIT 2 *

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INVERTER
SK2400H 2 2



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7.0 PARTS LIST



SYMBOL	NAME	1st		2nd	
		TYPE NO	MAKER	TYPE NO	MAKER
U1	IC	KA358	SEC	BA10358	ROHM
	"	KIA358	KEC	LM358	T. I
U2,3,5,6	IC	KA393	SEC	BA10393	ROHM
	"	KIA393	KEC	LM393	T. I
U4,7	IC	KA431CD	SEC	TL431CD	SGS
Q1, 3, 3B, 53, 53B, 104, 154	TR	KRC103S	KEC	KSR1103	SEC
Q101, 151		NO MOUNT			
Q2A, 2B, 4, 4B, 54, 54B, 105, 155	"	KRA103S	KEC	KSR2103	SEC
Q9, 9B, 15, 15B, 17, 18, 59, 65, 67, 68 Q10, 16, 60, 66	"	KRC104S	KEC	KSR1104	SEC
Q103, 153	FET	2N7002	SEC	2N7002	MOTOROLA
Q5, 11, 55, 61, 100, 102, 152, 170	TR	KST2222A	SEC	KTN2222A	KEC
Q71, 72, 73, 74	TR	KST2907A	SEC	KTN2907	KEC
Q6, 12, Q6A, Q12A, 56, 62	FET	IRFR5505	IR	2SJ246	HITACHI
	"	SFR9034	SEC		
Q7, 8, 13, 14	TR	2SC5103	ROHM	2SD1803	SANYO
	"	KTC5103D	KEC		
Q57, 58, 63, 64	TR	2SC4541	TOSHIBA	2SD1624T	SANYO
	"	KTD1624C	KEC		
D1, 5, 5B, 6, 7, 8, 12, 12B, 13, 14, 51, 55, 56, 57, 58, 62, 63, 64, 113, 163	DIODE	KDS184	KEC	DAN202K	ROHM
	"	SDS2838	AUK		
D2, 2A, 2B, 9, 9A, 9B	DIODE	B240	DIODE . INC	SK23/SK24	PANJIT
D52, 59	DIODE	B240	DIODE . INC	SK23/SK24	PANJIT
D3, 4, 4B, 10, 11, 11B, 53, 54, 60, 61, 101, 151	"	KDS226	KEC	EQUIVALENT	
	"	SDS7000	AUK		
D102, 152, 170	DIODE	5.6V ZENER	KEC	5.6V ZENER	HITACHI
D103, 104, 153, 154		NO MOUNT			
C1A, 1B	C-AL	220uF / 35V	SAMYOUNG	220uF / 35V	SAMSUNG
C1C	C-AL	150uF / 25V	SAMYOUNG	150uF / 25V	SAMSUNG
C3A, C3B, C17A, 17B	FILM	MPPS2A224J / K	SUNGHO	MMX-2A224J / K	HITACHI
C53, 67	FILM	MPPS2A364J / K	SUNGHO	MMX-2A364J / K	HITACHI
C4A, 4B, 4C, 18A, 18B, 18C	C-CERA	DISCRETE -3F330K	SEMCO		
C8, 9, 11, 15, 16, 58, 59, 65, 66, 100, C101, 102, 151, 152	"	CL21B104KBN	SEMCO		
C105, 106, 107, 108, 109, 110	"	CX32Y5V475Z	AVX	C3225JE1E475M	TDK
C10, 14, 60, 64	"	CL21C102JBN	"		
C80, 81, 82, 83, 103, 104, 153, 154	"	NO MOUNT			
C13	"	CL21B393KBN	"		
C6, 6B, 20, 20B, 56, 70, 12, 120	"	CL21F105ZBN	"		
C7, 21, 57, 71	TANTAL	10uF	SEMCO		
C75		NO MOUNT			

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SYMBOL	NAME	1st		2nd	
		TYPE NO	MAKER	TYPE NO	MAKER
L10, 11, 12, 13		NO MOUNT			
R1,26,51,123	CHIP-R	RC2012J302		EQUIVALENT	
R20		NO MOUNT			
R62, 87		RC2012J822			
R2, 27, 52, 77		RC2012J303		"	
R3, 28, 53, 67, 78, 90		RC2012J682		"	
R10, 10B, 35, 35B, 60, 85		RC2012J393		"	
R17, 23, 40, 68, 91, 101, 151, 120	CHIP-R	RC2012J103	SEMCO	"	
R93, 94	"	RC2012J563	"	"	
R15, 65	"	RC3216J222	"	"	
R6A-D, 7A-D, 31A-D, 32A-D, 56A-B, 57A-B, 81A-B, 82A-B, 121, 122	"	RC3216J471	"	"	
R11, 11B, 36, 36B,		RC3216J222			
R61, 86	"	RC3216J561	"	"	
R19, 42, 69, 92, 131, 134	"	RC2012J472	"	"	
R137, 140		RC2012J242			
R132, 133, 135, 136, 138, 139, 141, 142	"	RC2012J123	"	"	
R13, 38, 63, 88		NO MOUNT			
R43, 44		RC2012J683			
R22, 102, 152	"	RC2012J104	"	"	
R24		RC2012J332			
R12, 37	"	RC2012J203	"	"	
R25	"	RC2012J163	"	"	
R9, 9B, 34, 34B, 59, 84	"	RC2012J364	"	"	
R14, 18, 39, 41, 64, 89	"	RC2012J153	"	"	
R21	"	RC2012J182	"	"	
R103, 153	"	RC2012J473	"	"	
R104, 154	"	RC2012J475	"	"	
R106, 107, 156, 157	"	RC2012J000	"	"	
R105, 155	"	RC3216J123	"	"	
R100	"	RC3216J103	"	"	
R110A-L	"	RC3216J204	"	"	
T2, 3	TRANS	TM024	NAMYANG	TM024	KYUNG IN
	TRANS	TM024	DAI SUNG	TM024	DAI SH IN
T1, 4	TRANS	TM024R	NAMYANG	TM024R	KYUNG IN
	TRANS	TM024R	DAI SUNG	TM024R	DAI SH IN
T5, 6	TRANS	TM025	NAMYANG	TM025	KYUNG IN
	TRANS	TM025	DAI SUNG	TM025	DAI SH IN
L1, 2, 8, 8A, 9, 9A	COIL	KEL11	NAMYANG	KEL11	KYUNG IN
L3, 4	COIL	KEL47	NAMYANG	KEL47	KYUNG IN
L5, 6, 7	COIL	KEL11	NAMYANG	KEL11	KYUNG IN
F1, 2, 3	FUSE	SSQ2	BEL	451002	LITTEL
CN1	CONNECTOR			12505WS-15A00	YEONHO
CN3-1, 3-2, 4-1, 4-2	"			20015WR-050208	YEONHO
CN3-3, CN4-3	"			20015WR-070404	YEONHO
PCB	PCB	SK2400H, 1.9	YOUNGEUN	SK2400H, 1.9	KIJOO

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8.0 RELIABILITY SPECIFICATION

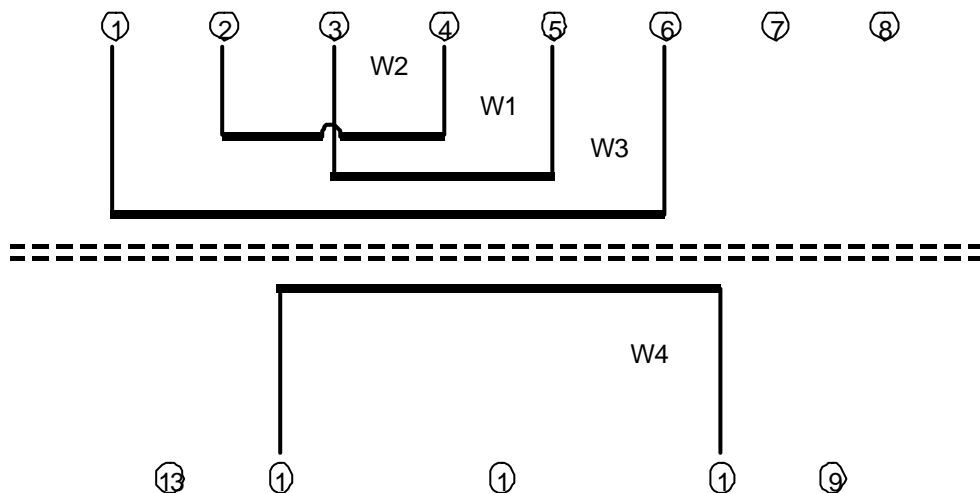
NO	ITEM	CONDITION AND METHOD
1	HIGH TEMPERATURE STORAGE TEST	TEMP.;70 DURATION: 500 hrs
2	LOW TEMPERATURE STORAGE TEST	TEMP.;40 DURATION: 500 hrs
3	HIGH TEMPERATURE HIGH HUMIDITY STORAGE TEST	TEMP.;40 ,HUMIDITY:95%RH DURATION: 500 hrs
4	HIGH TEMPERATURE HIGH HUMIDITY OPERATION TEST	TEMP.;40 ,HUMIDITY:95%RH DURATION: 1000 hrs
5	THERMAL SHOCK TEST	TEMP;-30 70 , 250 CYCLE (30 MINUTE), (30 MINUTE)
6	VIBRATION TEST	AMPLITUDE;1.5mm,FEEQUENCY;10 -55Hz, POSITION; TREE PERPENDLCULAR PLANES,DURATION;1000 hrs
7	HIGH TEMPERATURE OPERATION TEST	TEMP;50 DURATION;72 hrs
8	LOW TEMPERATURE OPERATION TEST	TEMP; 0 DURATION;72 hrs

9.0 DETAIL SPECIFICATION FOR KEY PARTS

9.1 TRANS (TM-024) ; CORE ROUND TAPE : YELLOW COLOR 

9.1.1 WINDING & ELECTRICAL CHARACTERISTICS

1) WINDING SPECIFICATION



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2) ELECTRICAL CHARACTERISTICS

01

No.	ITEM	TERMINAL	SPECIFICATION	REMARK
4-1	INDUCTANCE	5 - 2 6 - 1 10 - 12	28.6 uH \pm 12% 0.50 uH Ref. 460 mH \pm 15%	LCR-METER at <u>1.0</u> KHz. <u>1.0</u> V (25)
4-3	DC RESISTANCE	5 - 2	0.20 ohm MAX	WHEASTONE BRIDGE (YEW 2755)
4-4	WITHSTANDING VOLTAGE	BETWEEN PRIMARY TO SECONDARY (W1, W2, W3) (W4)	AC <u>2.5</u> KV R.M.S 1 MINUTE	CUT OFF CURRENT <u>5</u> mA TOS-8850
		BETWEEN WINDING TO CORE (W1, W2, W3, W4)	AC <u>1.5</u> KV R.M.S 1 MINUTE	
4-5	INSULATION RESISTANCE	PRIMARY TO SECONDARY COIL TO CORE	100 M ohm MIN at DC 500V	TOS-8850

9.1.2 MATERIAL LIST (TM-024)

NO.	COMPONENT	MANUFACTURE COMPONENT	NAME OF MATERIAL	MANUFACTURER OF MATERIAL	UL FILE NO.
1	CORE	SAM SUNG CORNING CO., LTD.	SL-2 EEA 21.2 m/m		
2	BOBBIN	JO KWANG ELECTRONICS CO., LTD.	(94V-0) SB EE20.6 LCP UL	SUMITOMO CHEMICAL CO., LTD.	E 54705 (M)
3	INSULATOR	SKC LTD	PETP FILM (SR55) 0.075mm(T) MIN		E 74359 (S)
4	WIRE	DONG YANG ELECTRONICS IND CO., LTD.	2 UEW 0.15 (AWG #35)		E 102761(S)
5			2 UEW 0.37 (AWG #27)		
6			F UEW 0.04 (AWG #44)		
7	INSULATION TAPE	DUCK SUNG TAPE CO., LTD.	POLYESTER FILM TAPE 0.025 mm X 16.0 mm		E 105147(S)
8	CORE FIXING TAPE	(Cat No. DTS-204)	POLYESTER FILM TAPE 0.025 mm X 5.0 mm		
9	WAX	MICRO WAX 180	MOBILOR ESSO CO., LTD.		



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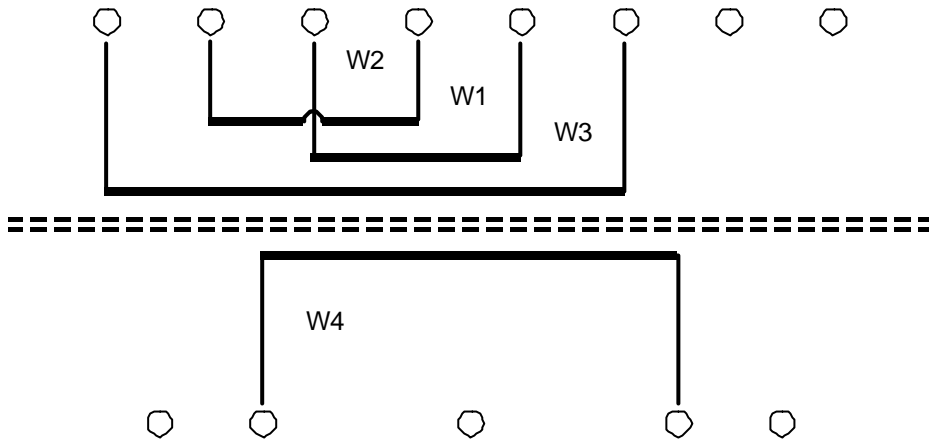
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9.2 TRANS (TM-024R) ;CORE ROUND TAPE :GREEN COLOR

9.2.1 WINDING & ELECTRICAL CHARACTERISTICS

1) WINDING SPECIFICATION



2) ELECTRICAL CHARACTERISTICS



No.	ITEM	TERMINAL	SPECIFICATION	REMARK
4-1	INDUCTANCE	5 - 2 6 - 1 12 - 10	28.6 uH $\pm 12\%$ 0.50 uH Ref. 460 mH $\pm 15\%$	LCR-METER at <u>1.0</u> KHz. <u>1.0</u> V (25)
4-3	DC RESISTANCE	5 - 2	0.20 ohm MAX	WHEASTONE BRIDGE (YEW 2755)
4-4	WITHSTANDING VOLTAGE	BETWEEN <u>PRIMARY</u> TO <u>SECONDARY</u> (W1, W2, W3) (W4)	AC <u>2.5</u> KV R.M.S 1 MINUTE	CUT OFF CURRENT <u>5</u> mA TOS-8850
		BETWEEN <u>WINDING</u> TO <u>CORE</u> (W1, W2, W3, W4)	AC <u>1.5</u> KV R.M.S 1 MINUTE	
4-5	INSULATION RESISTANCE	PRIMARY TO SECONDARY COIL TO CORE	100 M ohm MIN at DC 500V	TOS-8850

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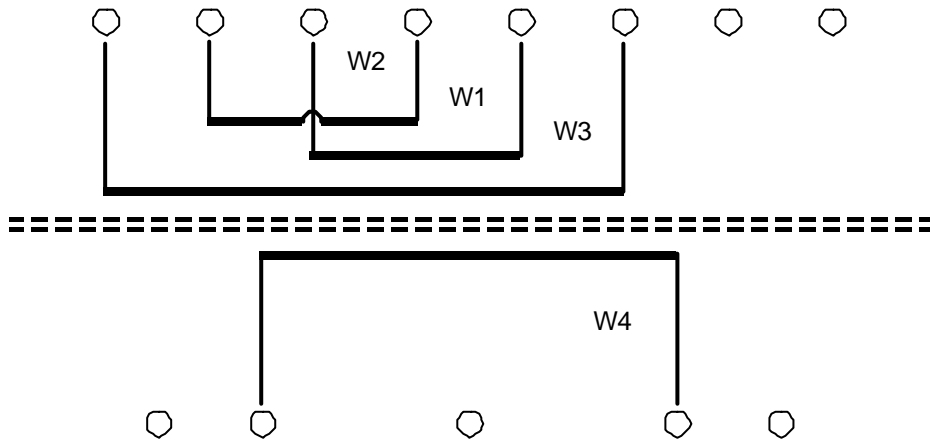
9.2.2 MATERIAL LIST (TM-024R)

NO.	COMPONENT	MANUFACTURE COMPONENT	NAME OF MATERIAL	MANUFACTURER OF MATERIAL	UL FILE NO.
1	CORE	SAM SUNG CORNING CO., LTD.	SL-2 EEA 21.2 m/m		
2	BOBBIN	JO KWANG ELECTRONICS CO., LTD.	(94V-0) SB EE20.6 LCP UL	SUMITOMO CHEMICAL CO., LTD.	E 54705 (M)
3	INSULATOR	SKC LTD	PETP FILM (SR55) 0.075mm(T) MIN		E 74359 (S)
4	WIRE	DONG YANG ELECTRONICS IND CO., LTD.	2 UEW 0.15 (AWG #35)		E 102761(S)
5			2 UEW 0.37 (AWG #27)		
6			F UEW 0.04 (AWG #44)		
7	INSULATION TAPE	DUCK SUNG TAPE CO., LTD.	POLYESTER FILM TAPE 0.025 mm X 16.0 mm		E 105147(S)
8	CORE FIXING TAPE	(Cat No. DTS-204)	POLYESTER FILM TAPE 0.025 mm X 5.0 mm		
9	WAX	MICRO WAX 180	MOBILOR ESSO CO., LTD.		

9.3 TRANS (TM-025) ;CORE ROUND TAPE: GREEN COLOR 01

9.3.1 WINDING & ELECTRICAL CHARACTERISTICS

1) WINDING SPECIFICATION



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2) ELECTRICAL CHARACTERISTICS



No.	ITEM	TERMINAL	SPECIFICATION	REMARK
4-1	INDUCTANCE	5 - 2 6 - 1 10 - 12	22.0 uH \pm 12% 0.50 uH Ref. 390 mH \pm 15%	LCR-METER at <u>1.0</u> KHz. <u>1.0</u> V (25)
4-3	DC RESISTANCE	5 - 2	0.20 ohm MAX	WHEASTONE BRIDGE (YEW 2755)
4-4	WITHSTANDING VOLTAGE	BETWEEN PRIMARY TO SECONDARY (W1,W2,W3) (W4)	AC <u>2.5</u> KV R.M.S 1 MINUTE	CUT OFF CURRENT <u>5</u> mA TOS-8850
		BETWEEN WINDING TO CORE (W1,W2,W3,W4)	AC <u>1.5</u> KV R.M.S 1 MINUTE	
4-5	INSULATION RESISTANCE	PRIMARY TO SECONDARY COIL TO CORE	100 M ohm MIN at DC 500V	TOS-8850

9.3.2 MATERIAL LIST (TM-025)

NO.	COMPONENT	MANUFACTURE COMPONENT	NAME OF MATERIAL	MANUFACTURER OF MATERIAL	UL FILE NO.
1	CORE	SAM SUNG CORNING CO., LTD.	SL-2 EEA 21.2 m/m		
2	BOBBIN	JO KWANG ELECTRONICS CO., LTD.	(94V-0) SB EE20.6 LCP UL	SUMITOMO CHEMICAL CO., LTD.	E 54705 (M)
03 3	INSULATOR	SKC LTD	PETP FILM (SR55) 0.075mm(T) MIN		E 74359 (S)
4	WIRE	DONG YANG ELECTRONICS IND CO., LTD.	2 UEW 0.15 (AWG #35)		E 102761(S)
5			2 UEW 0.37 (AWG #27)		
6			F UEW 0.04 (AWG #44)		
7	INSULATION TAPE	DUCK SUNG TAPE CO., LTD. (Cat No. DTS-204)	POLYESTER FILM TAPE 0.025 mm X 16.0 mm		E 105147(S)
8	CORE FIXING TAPE		POLYESTER FILM TAPE 0.025 mm X 5.0 mm		
9	WAX	MICRO WAX 180	MOBILOR ESSO CO., LTD.		

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9.4 DETAIL MATERIAL LIST FOR KEY PARTS (SAFETY)

SYMBOL	NAME	TYPE NO.	MANUFACURER	DESCRIPTION
FI	FUSE	451002	LITTELFUSE INC	UL FILE NO :E10480 CSA FILE NO :LR29862
		SSQ2	BEL	UL FILE NO :E20624 CSA FILE NO :LR39772
PCB	PRINTED WIRING BOARD	FR-4	KIJOO	UL FILE NO :E111636
			YOUNG EUN ELECTRONICS	UL FILE NO:E173507
CN1	"	12505WS-15A00	YEONHO	NYLON 4/6 UL94V-0
CN3-1, 3-2 CN4-1, 4-2	CONNECTOR	20015WR-050208	YEONHO	PA46 UL94V-0
CN3-3 CN4-3	"	20015WR-070404	YEONHO	"
T1, 4	TRANSFORMER	TM-024R	DAISUNG TELECOMMUNICATIONS	CLASS A (105 de.C) SEE TRANS SPEC
			NAMYANG ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			KYUNGIN ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			DAISHIN DENKEN	CLASS A (105 de.C) SEE TRANS SPEC
T2, 3	TRANSFORMER	TM-024	DAISUNG TELECOMMUNICATIONS	CLASS A (105 de.C) SEE TRANS SPEC
			NAMYANG ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			KYUNGIN ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			DAISHIN DENKEN	CLASS A (105 de.C) SEE TRANS SPEC
T5, 6	TRANSFORMER	TM-025	DAISUNG TELECOMMUNICATIONS	CLASS A (105 de.C) SEE TRANS SPEC
			NAMYANG ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			KYUNGIN ELECTRONICS	CLASS A (105 de.C) SEE TRANS SPEC
			DAISHIN DENKEN	CLASS A (105 de.C) SEE TRANS SPEC

10.0 PACKING REQUIREMENTS

125.0mm	
50.0mm	
PART CODE	
DESCRIPTION	
SPECIFICATION	
DATE OF MANUFACTURE	
MANUFACTURER	
QUANTITY	
60.0mm	

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SAMSUNG P/N	VENDOR #1 P/N	VENDOR #2 P/N	VENDOR #3 P/N	VENDOR #4 P/N
BN44-00044A	HIP0119A(SK2400H)			
VENDOR #1	SAMSUNG ELECTRO-MECHANICS CO.,LTD.			
VENDOR #2				
VENDOR #3				
VENDOR #4				
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